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Set: I

B. Sc. (Part – I) (Semester – II) (CBCS) Examination, October/ November – 2023

CHEMISTRY (Paper – IV) Analytical Chemistry

Subject Code: 72844

Day and Date: Tuesday, 28/11/2023

Total Marks: 50

Time: 2.30 to 4.30 p.m.

Instruction: Use of scientific calculator and logarithmic table is allowed

- Q1 Select the most correct alternative among those given below and rewrite the sentence: (10)
- pH of the water is measured by the instrument -----
 A) Potentiometer B) Thermometer
 C) Thermostat D) Barometer
 - Biochemical oxygen demand test carried out for ----- days
 A) One B) Three
 C) Five D) Seven
 - Nitrogen is the ----- nutrient required for the healthy growth of plants.
 A) Major B) Minor
 C) Micro D) Not essential
 - Accuracy Is used to express ----- of a measurement.
 A) reproducibility B) correctness
 C) Organic ability, D) inability
 - Which of the following is not the Column chromatography?
 A) Gas chromatography B) Paper
 C) SFC D) HPLC
 - The process of extracting a small portion of the material from its large quantity which truly represents the composition of the whole material is known as -----
 A) Analysis B) Process
 C) Sampling D) None of these
 - Phenolphthalein is the ----- indicator.
 A) Acid-base indicator B) Monochrome Black
 C) Solochrome Black D) None of these
 - The solution with known concentration is known as -----
 A) Molar B) Molal
 C) Normal D) Standard
 - In instrumental analysis, physical property of a substance is measured by any known -----
 A) Instrument B) Chemical test
 C) Sample D) None of these
 - The urea is ----- type of fertilizer.
 A) Potash B) Phosphatic
 C) Mixed D) nitrogenous
- Q2 Attempt Any TWO of the following (20)
- Define chromatography? Give its Classification.
 - Explain Ostwald's theory of Neutralization indicators.
 - Define fertilizers. What are the requirements of good fertilizers?
- Q3 Attempt Any Four of the following (20)
- What is the principle of Kjeldahl's method?
 - Give the classification of fertilizers?
 - Why TLC was superior than Paper chromatography?
 - Give the use of Eriochrome Black T indicator in EDTA titrations.
 - Give the classification of analytical methods of analysis.
 - What is biological oxygen demand?